

Chapter 1 –Review Problems

Self-Assessment:

- 1) $3(7 - 2x) + 5 = 23$
- 2) $-6(3x - 7) + 22x > 50$
- 3) $2|3x - 4| - 6 < 2(4 - x)$

Solving Equations:

- 1) $3x + 5 = 23$
- 2) $4 - 3(3 + 4x) = -7(2x - 1) - 8$
- 3) $\frac{3ax}{5} - 4c = \frac{ax}{5}$

Solving Inequalities:

- 4) $-2 + \frac{3(x-2)}{4} \leq -1$
- 5) $2 - 3x \geq 7(8 - 2x) + 12$
- 6) $5x - 4 > 16 \quad \text{or} \quad 3x + 2 < 17$

Solving Absolute Value:

- 7) $|2x - 4| + 5 = 21$
- 8) $\frac{2}{3}|3x - 6| = 4(x - 2)$
- 9) $\left| \frac{(x-3)}{2} \right| + 2 < 6$
- 10) $3|4x - 1| \geq 6(4 - x)$

Answers to Chapter 1 Review – Alg. 2:

Self-Assessment:

1) $x = \frac{1}{2}$

2) $x > 2$

3) $x > \frac{-3}{2}$ and $x < \frac{11}{4}$

Equations:

1) $x = 6$

2) $x = 2$

3) $x = \frac{10c}{a}$

Inequalities:

4) $x \leq \frac{10}{3}$

5) $x \geq 6$

6) $x = \text{all Reals}$

Absolute Value:

7) $x = -6, 10$

8) $x = 2$

9) $-5 < x < 11$

10) $x \leq -\frac{7}{2}$ or $\frac{3}{2} \leq x$